

Amendments to the Specification:

Amend the paragraph beginning at page 8, line 16, as follows.

The method of adding a mammalian telomere sequence is not particularly limited.

The method of expressing a mammalian telomerase *in vivo* and allowing it the function is preferable because the DNA molecule suffers less physical damage and gene manipulation in cells is enabled using homologous recombination techniques. In this method, the mammalian telomerase includes a hybrid telomerase in which only the RNA template among the telomerase constituents is modified into a mammalian type. A telomerase can be modified into a mammalian type structure by modifying the TLC1 gene encoding an RNA template of a yeast telomerase (Singer, M.S., and Gottschling, D.E., Science, 266:404-409 (1994)) by *in vitro* mutagenesis. This process replaces the DNA sequence “CACCAACACCCACACAC (SEQ ID NO:1)” corresponding to the template region with the mammalian type DNA sequence “CACCTAACCCCTAACCC (SEQ ID NO:2),” expressing the mutant TLC1 gene in yeast. The resulting expression product is then allowed to associate with a yeast telomerase protein *in vivo*, thereby reconstituting a functional hybrid telomerase.

Amend the paragraph beginning at page 11, line 10, as follows.

*S. cerevisiae* reportedly has a TLC1 gene encoding a template RNA of telomerase.

First, a mutation was introduced into a template region of the TLC gene by *in vitro* mutagenesis to prepare a mutant TLC1 allele (hereinafter referred to as HTM3) which codes a human telomere sequence (TTAGGG)<sub>n</sub> ~~in stead~~ instead of a yeast telomere sequence (TG<sub>1-3</sub>)<sub>n</sub>. More specifically, a DNA sequence “CACCAACCCACACAC (SEQ ID NO:1),” a template region of the TLC1 gene encoding a template RNA of a yeast telomerase, was converted to a human telomere sequence “CACCTAACCTAACCC (SEQ ID NO:2).” Moreover, the *Pvu*II/*Xho*I cleavage site was introduced into the ends of the HTM3 gene using Tag primer.